

NOVA

science enables the art to dance

IMSA's Trailblazing President Reflects on Remarkable Journey, Future Plans

As Dr. Stephanie Pace Marshall prepares for the next chapter in her lifelong learning journey, she shares her thoughts, dreams and hopes for IMSA, as well as her plans in this final interview for NOVA as IMSA's founding president. Marshall will step down on June 30, 2007.

NOVA: Of what accomplishments at IMSA are you most proud and why?

Marshall: This question is almost too big—but, if I had to name the roots of my pride in IMSA, it would be the extraordinary commitment, passion, and love our students, alumni, staff and Boards have brought and continue to bring to learning and to developing minds that intentionally seek to “give back” to the world.

Twenty years ago, our Board articulated a philosophy that said we would treat each child as if he/she was capable of significantly influencing life on the planet. Twenty years later, the IMSA community has articulated a draft mission “to ignite and nurture creative, ethical scientific minds that advance the human condition.”

It is this uncommon and uncompromising purpose and commitment...that will enable IMSA to remain an international trailblazer and incubator for innovation and imagination in STEM (Science, Technology, Engineering and Mathematics) education.

There are, of course, more visible and tangible accomplishments of which I am very proud. Here are just a few:

- We survived and thrived often against formidable challenges and our reputation as an exemplar in STEM education is internationally recognized.

- Our almost 3,400 graduates are making remarkable contributions to the world in every field of endeavor.
- We have served more than 52,000 Illinois students and 24,000 Illinois educators through a variety of innovative programs offered through our Center.
- Our students continue to excel by many measures—traditional indicators (standardized tests, academic competitions, and scholarships) and nontraditional indicators (path breaking research, generating new knowledge, and even entrepreneurial start-up companies). It is not an accident that founding leaders of YouTube, PayPal, Netscape, and YELP—just to name a few—are alumni of the Illinois Mathematics and Science Academy.

NOVA: What does IMSA need to focus on during its third decade?

Marshall: Embrace its unique and unparalleled opportunity to become the world's leading teaching and learning laboratory for imagination and inquiry. IMSA is an incubator, a think tank and a movement generator. The convergence of these three environments is a space IMSA can develop and nurture.

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IMSA Founding President
Dr. Stephanie Pace Marshall

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Dr. Stephanie Pace Marshall

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Immersion in this extraordinary mind-field will enable us "to ignite and nurture creative and ethical scientific minds that advance the human condition." This is IMSA's promise.

NOVA: What are you looking forward to the most as you look to the future?

Marshall: In a nutshell, I'm looking forward to shifting my current time balance from primarily externally directed agendas, events, and activities to internally directed ones. Everyone knows that I am not retiring. Although I am stepping down as IMSA's president, my work and my connection to IMSA's work will continue.

The title of my book, *The Power To Transform: Leadership That Brings Learning and Schooling to Life* offers the best

response to this question. I will continue to work with pioneering policy and government leaders, business leaders, foundation leaders, and educational leaders to transform the current paradigm of learning and schooling in ways that honor children, develop their unknown capacities, ignite and nurture their astonishing gifts, and enroll them (while they are young) in the big questions and issues of our time, so that they may practice and participate in shaping a more just and sustainable world.

It is this story that I will now tell, advance, shape and integrate into public discourse and public policy.

Note: Read more about Dr. Marshall's book and her views on leadership, learning and schooling at www.imsa.edu/tales.

Reflections on Dr. Marshall... in Their Words

For nearly 20 years, IMSA has been led by a visionary educator and distinguished executive, its founding and sole president, Dr. Stephanie Pace Marshall. While many have contributed to IMSA's success to date, clearly Dr. Marshall's expertise, skills, passion, business and political acumen, and tireless advocacy for students and educators have made possible countless opportunities and achievements. The IMSA community, those we serve, the people of Illinois, and friends of IMSA in our nation and world have benefited significantly as a result of her outstanding leadership.

Dr. Luis Nuñez, Chairman, IMSA Board of Trustees

If those of us involved in the early days can be credited with any significant contribution it would be the identification and hiring of Dr. Stephanie Pace Marshall to lead us on this exciting journey, one which has placed IMSA at the forefront of talent development in math and science in our state, nation and world.

Jim Pearson, Director, IMSA Fund for Advancement of Education, Founding and Past Chairman, IMSA Board of Trustees

Without her, IMSA would've remained merely an idea. Instead, because of her vision, persistence, stewardship and nurturing leadership, IMSA has grown to the preeminent institution it is today. The successful entrepreneurs, educators, physicians, physicists, etc. that have come out of IMSA in a short time is a testament to her vision.

Samuel Choi '89, Karen Choi

Stephanie Marshall's brilliant thesis invites us to think differently about learning and schooling both in the United States and around the globe. In fact, it does much more. It provides us with ways by which we can change our thinking about learning, and thus offers a new map for schooling that can excite all students and leaders of progressive education.

Robert W. Galvin, Chairman Emeritus, Motorola Inc., on Dr. Marshall's book, *The Power to Transform: Leadership That Brings Learning and Schooling to Life*

U.S. Department of State Invites IMSA Staff Member to Foster Educational Collaborations With Thailand

When the U.S. Department of State invited IMSA staff member Dr. Raymond Dagenais (president of the Illinois Science Teachers Association from 2005-2007) to travel to Thailand to learn about the Thai culture and educational system, he knew it was a proposal he could not turn down.

"With the already large numbers of students from other cultures in many school systems in the United States and the increasing quality of students coming out of science programs in other countries, it has become imperative that we better understand other approaches to science education as well as share our best practices with others striving to improve their science education programs," Dr. Dagenais said.

Dagenais, who is a program development specialist at IMSA, spent a week in Thailand with Ministry of Education officials, university professors, heads of school science departments, school teachers and university students.

During his stay, he made presentations to numerous audiences of eager Thailand educators at stops including Chiang Mai University, Mahidol Wittayanusorn School in Bangkok and Prince of Songkla University in Hat Yai.

Dagenais spoke about a variety of educational topics including strategies and methods of gifted student identification and selection procedures, assessment of



IMSA Staff Member Dr. Raymond Dagenais and Thailand Interpreter Dr. Thanit Pewnin.

student performance, academic standards for science and mathematics and professional development in science and mathematics.

"The Thailand educators were particularly interested in the professional development presentation describing IMSA's Excellence 2000+ Program, designed to prepare partner school teachers to work with their students during after school sessions to enrich their understanding of mathematics and science," Dagenais said.

To learn more about IMSA's Excellence 2000+ Program (E2K+) visit <http://www.imsa.edu/programs/e2k/>.

In the spring, IMSA will host a visit from Thailand educators who hope to gain just as much from their visit as Dagenais did from his.

"This visit has spawned new ideas and promise for both educational communities. It is now time to move forward using what we share with and learn from other cultures."

"With the already large numbers of students from other cultures in many school systems in the United States and the increasing quality of students coming out of science programs in other countries, it has become imperative that we better understand other approaches to science education as well as share our best practices with others striving to improve their science education programs."

Dr. Raymond Dagenais
IMSA Program Development Specialist

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IMSA Fund Establishes Endowment Program

**Primary Fund Named to Honor IMSA's Founding President
By Jennifer Spuehler, Director of Development**

In November 2006, the IMSA Fund Board of Directors voted to establish an endowment program. To honor Dr. Stephanie Pace Marshall's 20 years of stellar leadership as IMSA's founding president, the Board has named the primary endowment fund the Stephanie Pace Marshall Endowment to Ignite Innovation.

[Note: Dr. Marshall is stepping down as IMSA's President effective June 30, 2007].

The Marshall Endowment fund will provide annual support for IMSA to seed innovation, build strategic capacity and respond to significant unanticipated opportunities, as approved by the IMSA Fund Board. This fund will give IMSA much-needed agility and flexibility it simply does not have with state appropriations and restricted grants and gifts.

Michael Suh, IMSA '97, an early major gift donor to the Marshall Endowment fund, put it this way: "...an endowment represents the Board's and donors' commitment to IMSA's future...instead of filling all of today's holes, an endowment enables projects and initiatives which have

yet to be conceived to have the opportunity to change the way we think of education and learning when that time comes. And certainly that will be money well spent."

Gifts of any amount will be accepted for the Marshall Endowment fund.

In addition to the Marshall Endowment fund, the IMSA Fund will now accept contributions for named endowment funds restricted for specific programs or projects of interest to a donor and to IMSA. A minimum initial gift of \$20,000 is required to establish a fund. The first named endowment fund has been established by the Nayak Foundation Charitable Trust. Nicholas and Anjali Nayak, parents of Zachary Nayak '02, established this fund to support IMSA students who wish to learn about grant writing. Earnings from this fund will help purchase resources, hire tutors or speakers, and pay for students to attend workshops on grant writing.

For more information on the IMSA Fund's new endowment program, contact Jennifer Spuehler, Director of Development, at jspuehler@imsa.edu or (630) 907-5989.

Other Highlights:

The IMSA Fund gratefully acknowledges the generous support of major grant funders, including:

- Grand Victoria Foundation, \$130,000, to support IMSA's Problem-Based Learning work with schools, teachers and students in the Fox Valley area and the preparation of PBL materials for expansion statewide and beyond.
- ComEd, An Exelon Company, \$90,000, to support the IMSA-ComEd CyberQuiz 4Kids Challenge. The challenge, available at www.imsa.edu, features stimulating mathematics and science brainteasers and word problems for Illinois students in grades six through nine.
- Lehman Brothers Foundation, \$60,000, to support IMSA's outreach programs.
- Polk Bros. Foundation, \$40,000, to support IMSA's Minority Recruitment and Retention efforts.
- Donors to the IMSA Fund also are supporting IMSA20 celebrations.

On October 7, 2006, IMSA celebrated its 20th anniversary with members of the IMSA community whose "bold ideas" and "world-class results" have made IMSA a leader in developing talent and leadership in mathematics, science and technology for our state, nation and world. We appreciate all the efforts of the volunteers, and are especially grateful to the alumni, parents, current and former faculty and staff, and corporations who made contributions to a highly successful event.

The IMSA 20th Anniversary Celebration Dinner will take place on April 20, 2007 at Tellabs. This event will honor distinguished alumni and individuals who demonstrate strong and enduring leadership on behalf of IMSA and their fields of endeavor. This event is made possible by the generous support from corporate sponsors such as Tellabs, Rush-Copley Medical Center, Cabot Microelectronics, ComEd, An Exelon Company and ITW. For more information, contact IMSA20@imsa.edu.

IMSA20: A Time to Recognize Bold Ideas and World-Class Results

Honorees to Be Recognized at IMSA's 20th Anniversary Celebration on April 20, 2007.
For more information about the event, contact IMSA20@imsa.edu.



One of IMSA's "20 cakes for 20 years" proclaims "Bold Ideas and World-Class Results."



IMSA20 Dinner—October 2006 (standing left to right) IMSA Fund Board member William White, Marlene Pearson, Jane White, Fund Board members James Pearson and Herbert Knight and (seated) Nancy Knight.



Convocation—August 2006 (left to right) Principal Dr. Eric McLaren, Convocation Speaker and First Lieutenant Kenyatta Ruffin '99, President Dr. Stephanie Pace Marshall, Resident Scholar Dr. Leon Lederman, Student Council President John Li and cellist Chris Trigg '05.



IMSA20 Dinner—October 2006 (left to right) IMSA parents Lorna Ruddy, Mary Corrigan, Gina Zager, Charles Corrigan and Dave Zager.



IMSA20 Dinner—October 2006 (left to right) Ryan Armour '99, Amanda Armour '99, Jennifer Peek Wylie '92 and Joseph Wylie '92.



IMSA students test their bouncing skills during the September 2006 IMSA20 Student Carnival hosted by the Residential Life staff.

IMSA Launches Board of Trustees Alumni Awards Program

To celebrate IMSA's 20th Anniversary, the IMSA Board of Trustees Alumni Awards Program was unveiled in the fall of 2006. The Alumni Awards recognize the men and women of IMSA who deliver outstanding contributions to their field of endeavor, to IMSA, and to the citizens of Illinois, our nation and world.

The Alumni Award recipients will be recognized at IMSA's 20th Anniversary Celebration to be held on April 20, 2007 at Naperville-based Tellabs. For more information about the event, contact IMSA20@imsa.edu.

IMSA Board of Trustees Chairman Dr. Luis Nuñez said the board was extremely impressed by the quality of the nominees.

"Although most of these IMSA graduates are only in their 20s and 30s, many have attained goals which are beyond their years," Dr. Nuñez said. "IMSA and the entire state of Illinois can be extremely proud of these leaders."

IMSA President Dr. Stephanie Pace Marshall said the Alumni Awards program demonstrates IMSA's "return on investment" and impact on citizens in Illinois and beyond during IMSA's 20th Anniversary year.

"We congratulate all of our outstanding IMSA alumni who serve as wonderful role models for our students, as well as role models in their own communities, fields of endeavor and the world in which we live," Dr. Marshall said.

Three categories of awards were given: the Alumni Trailblazer Award, the Alumni Distinguished Leadership Award and the Alumni Titan Award.

The Alumni Award Categories

The Alumni Trailblazer Award is bestowed when merited and honors alumni who personify IMSA's philosophy statement that there will be alumni who "create new intellectual worlds, cure a dreaded human ailment or in some other way significantly influence life on our planet." The outstanding achievements of these

honorees will have earned national or international prominence for a ground-breaking or sweeping initiative that has redefined and improved the way significant numbers of citizens live, learn or work.

The Alumni Distinguished Leadership Award, an annual award, goes to alumni who have made distinguished achievements or leadership contributions in their professional fields of endeavor consistent with IMSA's mission. The awardees also may be recognized for significant civic or community contributions or for extraordinary courage and selflessness under challenging circumstances.

The Alumni Titan Award, an annual award, honors alumni, who through outstanding service to IMSA, advance the institution's mission and work. The honorees are enthusiastic and energetic IMSA champions who dedicate significant time, talent and/or treasure to endeavors that help the Academy fulfill its role in developing talent and leadership in mathematics, science and technology for our state, nation and world.

The Alumni Award Recipients

For complete profiles of the following 12 Alumni Award recipients, visit www.imsa.edu/alumni/awards.

The Alumni Trailblazer Award Recipients:

Robert McCool '91
Rob McCool '91 along with his twin brother and fellow IMSA graduate Mike, served on the team at the University of Illinois at Urbana-Champaign that created Mosaic, the Internet Browser used to start Netscape. In addition, McCool is the original creator of the NCSA HTTP Web server which later evolved into the Apache HTTP Web server. The Apache HTTP continues to be the most popular Web server in use.



Ramez Naam '90

Ramez Naam served as the Group Program Manager for MSN Search at Microsoft Corporation. There, he led the development of the revolutionary search engine by which 360 million individuals worldwide can both quickly and precisely find answers to their queries on the World Wide Web in 20 languages each month. Naam also is a published author.



Yu Pan '95

Yu Pan '95 is one of the six founding team members of PayPal, an eBay company that has revolutionized the way people do business on the Internet. Pan currently works in engineering and product development at the hottest Web site on the Internet, YouTube (www.youtube.com).



The Alumni Distinguished Leadership Award Recipients:

Benjamin Chelf '96

Ben Chelf is Chief Technology Officer and a founder of Coverity, Inc., which provides state-of-the-art automated source code analysis for customers as varied as NASA, IBM, Sun Microsystems, the Lawrence Livermore National Laboratory and Naperville-based Tellabs. Coverity was recently recognized in *The Wall Street Journal* for The Journal's Technology Awards.



12 Alumni to Be Recognized in April 2007

Scott Gaudi '91

Scott Gaudi, Ph.D., was named by *DISCOVER* magazine as "one of the 20 scientists to watch in the next 20 years" and already has discovered two planets. As reported in *National Geographic*, his most recent discovery is a new, low-mass planet found using a microlensing technique.



Noah Rosenberg '93

Noah Rosenberg, Ph.D., is a pioneering, award-winning researcher in the fields of mathematics, evolution and genetics. In 2003, Rosenberg's article *Genetic Structure of Human Populations* was named The Lancet Biomedical Research Paper of the Year.



Terri Willard '89

Terri Willard is a Rhodes Scholar, Henry Luce Scholar, Hearst Senate Youth Program Scholar, Georgetown School of Foreign Service Scholar and a National Merit Scholar. As a project manager for the International Institute for Sustainable Development (IISD) in Canada, Terri has led numerous global initiatives including the Youth Creating Digital Opportunities Coalition and the Sustainable Development Communications Network.



Tuwanda Williamson '91

Tuwanda Williamson, M.D., worked for Direct Relief International as the director of a medical team delivering care to 40,000 isolated villagers along the Rio Beni River in Bolivia. Williamson currently works as a physician in inner-city Chicago and also is the director of a local center



that provides care through local churches to those most in need.

The Alumni Titan Award Recipients:

Michael Brody '96

Michael Brody is an active member of the IMSA President's Alumni Advisory Council and has participated in numerous IMSA events including a faculty-led forum on Agroterrorism, IMSA Convocation and the Hollister Memorial Lecture. Brody now serves on the Board of Trustees' Presidential Search Committee.



Andrea Croll '97

Andrea (Ande) Croll has served as the IMSA Alumni Association President since 2005, leading and coordinating IAA volunteer efforts in cooperation with IMSA staff. Under her leadership, the IAA cabinet achieved 100% participation in the IMSA Annual Fund. In addition, Ande has served as the Alumni Liaison to the IMSA Board of Trustees since 2003.



John Hoesley '89

As Treasurer of the IMSA Fund for Advancement of Education, John Hoesley is the first alumnus to serve as an officer on this Board. Hoesley's expert counsel informed the design and start-up of IMSA's TALENT program (Total Applied Learning for Entrepreneurs), and he provides helpful guidance and support in alumni relations and development.



Douglas Pratt '97

Doug Pratt is the immediate past president of the IMSA Alumni Association (IAA) (2003-2005) and served on the IAA Cabinet as an at-large member from 2001-2003 and 2005-2006. Through his efforts, the IAA president now serves as an official liaison to the IMSA Board of Trustees. In addition, he helped to identify and facilitate the appointment of the first IMSA alumnus to serve as a voting Trustee.



IMSA's Excellence 2000+ Program Honored as "Best Practice" at Bayer Corporation's STEM Education Diversity Forum

The Illinois Mathematics and Science Academy's Excellence 2000+ Program (E2K+) was featured by the Bayer Corporation as one of seven "Best Practice Secondary STEM Education Programs" nationwide at the company's first-ever STEM education diversity forum, held in Washington, D.C. in September.

E2K+ Program Director Dr. Susan Bisinger said the event, attended by federal and state elected officials, government agencies, and industry and trade organizations, was an excellent opportunity to learn about other "best practice" programs in science, technology, engineering and mathematics (STEM) from throughout the country, as well as showcase IMSA's E2K+ Program.

"I was thrilled to participate in the forum, and of course I love to talk about E2K+," Bisinger said. "Our IMSA team knows that students and teachers love the E2K+ program, and the invitation from Bayer was a further affirmation that we're doing the right things to keep middle school kids interested and motivated about math, science and technology."

IMSA Excellence 2000+ (E2K+) is an after-school enrichment program for Illinois middle school students who are talented, interested and motivated in mathematics and science. IMSA E2K+ places a special emphasis on students who are historically

underrepresented and underserved in mathematics and science. The program provides on-going professional development for the participating Illinois middle school teachers. Currently, there are 39 active E2K+ sites throughout Illinois. During the first six years, the program was conducted at 62 sites with over 3500 students participating.

The forum, entitled Bridging the Diversity Gap in Science and Engineering: Introducing STEM Industries to K-12 Best Practice Programs, showcased a number of best practice pre-college STEM education programs that had a "proven track record of helping students, particularly girls and underrepresented minorities, to participate and achieve in STEM."

Dr. Mae C. Jemison, the nation's first African-American female astronaut, a chemical engineer, physician and CEO of an emerging STEM company, served as the moderator of the daylong event. In addition, IMSA Resident Scholar and Nobel Laureate in Physics Dr. Leon Lederman presented the keynote address.

Bayer Corporation President and CEO Dr. Attila Molnar said the forum came at a critical time for our country.

"One of the biggest challenges the United States faces today is the dwindling number of scientists and engineers that graduate

from our colleges at a time when we also face increasing competition in all technological areas from other countries," Dr. Molnar said. "At the same time, there exists in this country a vast untapped talent pool of those American students who traditionally have been underrepresented in STEM fields, including women, African-Americans, Hispanic Americans and Native Americans."

IMSA E2K+ began with seven initial pilot sites during the 2000-2001 academic year at the request of the Illinois General Assembly, with the strong support of the Speaker of the House and Governor. Each site serves 20 to 30 students and three teachers. It is modeled, in part, after the highly successful after-school Mitchell Excellence 2000 enrichment program in Israel for junior high school students "living in the Israeli periphery." Additional Excellence 2000+ programs operate in Iowa and New York.

"The ultimate purpose of the forum is to further raise awareness and foster this talent pool by showcasing for STEM industry executives successful programs they may want to support and/or replicate in their local communities -- something many of them indicate they wish to do," said Dr. Molnar, referring to the results of a survey that Bayer released in May.



Illinois Mathematics and Science Academy's E2K+ Project Director Dr. Susan Bisinger (sixth from left) with her six fellow panelists, all of whom presented their best practice science, technology, engineering and math, or STEM, secondary education programs at Bayer Corporation's recent STEM Education Diversity Forum in Washington, D.C. Dr. Mae C. Jemison (fifth from left), astronaut and science literacy spokesperson for Bayer's /Making Science Make Sense/ initiative, served as moderator. The other panelists included (from left to right): Morton Slater, Director, Gateway Institute for Pre-College Education; Ghanya Thomas, Program Director, Biotech Partners; Niel Tebbano, Vice President, Project Lead The Way; Cecilia Hernandez, Manager, American Chemical Society's Project SEED; Leann Yoder, Executive Director, Junior Engineering Technical Society (JETS); and Lorraine Mulfinger, Director, Science in Motion.

Students Throughout Illinois Take the IMSA-ComEd CyberQuiz 4Kids Challenge

Students at Hinsdale Middle School have risen to the "challenge" again, and again, and...again!

In fact, students there are so enthusiastic about the IMSA-ComEd CyberQuiz 4Kids Challenge that they have received a plaque three months in a row (October-December 2006) for having the most correct responders. Their efforts also are being recognized in January 2007 by their Board of Education.

The IMSA - ComEd CyberQuiz 4Kids Challenge located at www.imsa.edu features stimulating mathematics and science brainteasers and word problems for Illinois students in grades six through nine. The IMSA - ComEd CyberQuiz 4Kids supports classroom learning by enhancing student interest and motivation in mathematics and science. The project is made possible thanks to the support of ComEd, An Exelon Company.

Launched in January 2006, CyberQuiz 4Kids attracted 1300 student participants during the first year of the program.

This is good news to ComEd, sponsor of the annual program.

"Industries like ComEd need innovative technical and scientific leaders," said Steve Solomon, ComEd's Senior Manager of Corporate Citizenship. "It's important that youth develop a love for mathematics and science at a young age so they can pursue demanding college programs in mathematics, science and technology."

Students who submit correct answers to one of the monthly CyberQuiz challenges are entered into a monthly random prize drawing for an iPod. In addition, those students are entered into an annual random grand prize drawing for an Apple portable computer or four tickets to Six Flags Great America in Gurnee, Illinois.

In 2006, student prize winners were from Lena, Lindenhurst, Morton, Naperville, Peotone and South Elgin, Illinois.

Every student who submits a correct answer to one of the monthly online CyberQuiz challenges also receives an IMSA-ComEd certificate of achievement and an invitation to attend a special recognition event at IMSA.

Commonwealth Edison Company, ComEd, is a unit of Chicago-based Exelon Corporation (NYSE: EXC) one of the nation's largest electric utilities with approximately 5.2 million customers and more than \$15 billion in annual revenues. ComEd provides service to approximately 3.7 million customers across Northern Illinois, or 70 percent of the state's population.

IMSA - ComEd CyberQuiz 4Kids=



(left to right) Steve Solomon, ComEd Senior Manager of Corporate Citizenship, Jason Rock, IMSA Junior Class of 2008, Jane St. Pierre, IMSA Director of Marketing and Communications, Paula Conrad, ComEd Manager of Corporate Citizenship, Margaret Hernandez, IMSA CyberQuiz 4Kids Coordinator.

Service to Illinois and Beyond

Professional Contributions

Recent examples include:

IMSA President **Dr. Stephanie Pace Marshall** was featured in the January 2007 edition of *Chicago* magazine in an article entitled "The Brain Behind Brainiac High" featuring IMSA's educational program.

Dennis Czerny and **Audrey Wells**, members of the English faculty, received certification with the National Board of Professional Teaching Standards (NBPTS). Nearly 30% of IMSA faculty members are now certified by NBPTS as National Board Certified Teachers (NBCT). Czerny and Wells now join a group of only 1,986 other NBCTs in the state of Illinois.

World Languages French teacher **Willa Shultz** was selected to receive the Illinois Council on the Teaching of Foreign Languages 2006 Distinguished Service to Foreign Language Learning Award. The awards were established in 1988 to honor outstanding foreign language educators in the field of foreign language teaching and research.



IMSA World Languages Faculty
Member Willa Shultz

Mathematics teacher **Dr. Michael Keyton** presented *Triangle Centers* in November as part of the Elmhurst College Department of Mathematics & Physics Fall 2006 Seminar Series.

Matthew Wicks, associate director of operations for the Illinois Virtual High School, served as the chairperson for the Virtual School Symposium Annual Conference October 23-24 in Denver, CO. In addition, Wicks served as a contributing writer to the article, "Measuring Outcomes in K-12 Online Education Programs, the Need for Common Metrics," published in Vol. 3 Issue 3 of the United States Distance Learning Association *Distance Learning* magazine.

Carl Heine, project director for the 21st Century Information Fluency Program, presented *Five Things Digital Natives Cannot Do* at the Illinois School Library Media Association conference and the Illinois Education and Technology conference in November.

IMSA Kids Institute® Program Assistant **Tracy Miller** and Science Specialist **Kit Pfeifer** presented the *IMSA on Wheels* program model at the 2006 Illinois Science Teachers Association (ISTA) annual conference in November.

Director of Curriculum, Assessment and Research **Dr. David Abler** was invited by the Office of the Chinese Language Council International to be a member of a U.S. educator delegation that traveled to China for a one-week educational tour in July 2006. During their stay, the delegation learned about the educational system in China and discovered ways to bring the Chinese language into their classrooms.

Student Achievements

Recent examples include:

Senior **Francisco Saldana** of Chicago was one of only 10 international students selected to participate in the International IT-Gifted Youth Camp held at the Information and Communications University in Daejeon, Korea, August 7-11, 2006. The primary goal of the program is to stimulate interest and achievement in IT among high school students in the world.



IMSA senior Nora Xu

IMSA senior **Noru Xu** of Naperville is among 40 finalists from throughout the nation and several other countries named in the 66th Intel Science Talent Search. Xu, the only finalist from Illinois, will compete for more than \$530,000 in scholarships. In addition, IMSA students named semi-finalists include seniors **Chaoran Chen** of Westmont, **Susan Dittmer** of St. Charles, **Mahesh Vidula** of Naperville and **Lilly Zhu** of Burr Ridge.

A team of four IMSA seniors were one of only five in the world to receive the ranking of "National Outstanding" in the ninth international High School Mathematical Contest in Modeling competition (HiMCM). The students were **Hon Lung Chu** of Chicago, **Dennis Kriventsov** of Arlington Heights, **Francisco Saldana** of Chicago and **Caleb Wang** of Vernon Hills. A second IMSA team



IMSA senior Francisco Saldana

including junior **Justin Johnson** of Aurora, junior **Adam Novak** and senior **Nathan Pierson** of Naperville and junior **Parker Schmitt** of Winnetka received the rank of "Regional Outstanding."

IMSA seniors **Victor Liou** of Elk Grove Village, **Mahesh Vidula** of Naperville, **Fan Zhang** of Streamwood and **Lilly Zhu** of Burr Ridge were four of only six semi-finalists from Illinois in the national 2006-07 Siemens Competition in Mathematics, Science and Technology.

IMSA junior **Marilyn Blasingame** of Belvidere was selected as an ACTR Russian Scholar Laureate for 2006. Only 62 Russian students nationwide were selected as ACTR (American Council of Teachers of Russian) scholars.

IMSA sophomore **Yifei Huang** of Naperville was selected to the All-State Orchestra at

the All-State Music Convention in Peoria. In addition, juniors **Rachel Banke** of Shabbona, **Josh Cote** of Winnebago and **Colin Johnston** of Bristol also were selected for the Honors All-State Orchestra.

Alumni Achievements

Recent examples include:

Dr. Mia Markey '94, was chosen as the recipient of the 2006 AMIA (American Medical Informatics Association) New Investigator Award. The award recognizes an individual for "early informatics contributions and significant scholarly contributions on the basis of scientific merit and research excellence." Dr. Markey is an assistant professor in The University of Texas Department of Biomedical Engineering and also directs the Biomedical Informatics Lab. She is currently designing computer software to help radiologists

detect the signs of breast cancer most commonly missed in mammograms.

Christy Lee '92, was named by *Peoria Magazines* as one of the "40 Leaders Under Forty." Christy is an engineering supervisor with the Product Research and Development Team at Caterpillar, Inc. She received the Caterpillar Technology & Solutions Division recognition for playing an active role in a research program to develop a wireless structural health monitoring system in conjunction with experts from Caterpillar and other companies.

Steve Chen '95 is one of the co-founders of YouTube, named by *Time Magazine* as its "Invention of the Year for 2006."

For the Second Year, the College Board Advanced Placement Program (AP) Recognizes IMSA as "Best in the World"

In the 2006 and 2007 Advanced Placement Report to the Nation, IMSA was recognized as having the strongest results in the world among like-size schools for AP Physics C: Mechanics and for AP Physics C: Electricity and Magnetism.

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IMSA/IVHS Chosen to Provide Professional Development in State's Technology Immersion Pilot Project

The Illinois Mathematics and Science Academy (IMSA) has been chosen to play a key role in the Illinois Technology Immersion Pilot Project (TIPP), aimed at helping to bridge the digital divide in Illinois middle schools by providing individual students access to on-demand digital learning resources through personal laptops.

Unveiled by Governor Rod Blagojevich, Lt. Gov. Pat Quinn and the Illinois State Board of Education in the fall of 2006, the Technology Immersion Pilot Project, a three-year pilot, will bring a one-to-one wireless computing environment to more than 1700 sixth grade students and their teachers in 18 schools throughout the state. The goal of the program is to bring laptop computers into the classrooms to help improve student achievement and "anytime, anywhere" access to learning.

"We live in a technology-driven age where computers are essential tools in most

industries and workplaces," said Gov. Blagojevich. "But computers can also be valuable tools as part of the learning process. With this pilot program, we'll give students another resource for learning, and, at the same time, help them develop technology skills that will help them compete when they're finished with school and ready to enter the workforce," he added.

The professional development component of TIPP will be provided by the Illinois Virtual High School (administered by IMSA), through online courses and on site sessions with teachers, administrators and technology support staff in the seven districts chosen to receive grants for the project. These districts include: City of Chicago School District 299, Community Consolidated School District 59 (Arlington Heights), Woodstock Community Unit School District 200, Joliet Public School District 86, Springfield School District 186,

Southeastern Community Unit School District 337 (Bowen) and Calhoun Community Unit District 40.

The primary goal of the professional development is to help educators integrate laptop computers into teaching and learning in order to achieve the academic improvement plans created by each school's technology immersion committee.

IMSA was a founding partner of the Illinois Virtual High School and today fully manages and administers the program on behalf of the Illinois State Board of Education. Since the 2000-01 year, the IVHS has provided "anytime, anyplace" online offerings to thousands of students in high school and some middle school classroom throughout Illinois. Today, one out of every three high schools in Illinois uses IVHS services.



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